

Product Information Sheet

ISSUE A

ALLOY 867

A. W. Fraser Alloy 867 is a high strength manganese bronze or high tensile brass conforming to the requirements of UNS C86700.

Alloy 867 has high strength, good wearing properties and good ductility, with reasonable machinability.

Alloy 867 has reasonable corrosion resistance but may be susceptible to dezincification under certain conditions.

The composition of A. W. Fraser alloy 867 is strictly controlled as are the casting conditions. Alloy 867 products are manufactured using the latest continuous casting technology.

ALLOY 867 - MANGANESE BRONZE

SUMMARY OF PROPERTIES

Chemical Composition - percent

Element			Nominal
Copper	Cu	55.0 - 60.0	58.0
Aluminium	Al	1.0 - 3.0	2.0
Iron	Fe	1.0 - 3.0	2.0
Manganese	Mn	0.10 - 3.5	1.8
Lead	Pb	0.50 - 1.5	1.0
Nickel	Ni	1.0 maximum	
Tin	Sn	1.5 maximum	
Zinc	Zn	30.0 - 38.0	35.0

Mechanical Properties [Typical]

Yield Strength	290 MPa (42,000 psi)
Ultimate Tensile Strength	586 MPa (85,000 psi)
Elongation	20%
Hardness	155 BHN

Continuous Cast

Specific Gravity	8.33
Machinability Rating (Free Machining Brass=100)	55
Max. Operating Temperature	260°C (500°F)
Stress Relieving Temperature	260°C (500°F)
Time at Temperature	1 hour per 25mm of section thickness

Comparative Specifications

DIN 1709 CuZn34Al2 *, BS 1400 HTB2 *

* Similar but not identical